significantly reduced wall thickness by 31% ($p<0.05$) compared DSS and normalized compared to DS0). LV function was significantly increased in both DSS groups compared to DS0 (LVP+ 50 %,$p<0.05$), with no differences between the DSS and DSSENOS rats. Diastolic dysfunction was evidenced by increased LVEDP (+ 81%, $p<.0.05$) and diastolic stiffness constant (+180%, $p<0.05$) compared to DS0. In the DSSENOS group this diastolic dysfunction was improved with reduced LVEDP (-36%, $p<0.05$) and diastolic stiffness constant (-110%, $p<0.05$) compared to the DSS-group.

4. Summary:
The animal model for DSS is a model for isolated diastolic dysfunction. Treatment with the eNOS-enhancer S803 improved diastolic dysfunction, associated with a reduction of heart weight and a decrease of LVEDP and diastolic stiffness. We conclude that a pharmacological activation of eNOS is benefical in diastolic heart failure and therefore may be a future target for pharmacological therapy.

Statins reduce oxidized-LDL-mediated histone modifications and gene expression in cultured human endothelial cells

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Introduction:
Cardiovascular diseases, notably atherosclerosis are the most common cause of death in western industrial countries. Inflammatory activation of the endothelium by oxidized low-density lipoprotein (ox-LDL) has been implicated in the development of chronic vascular lesions and coronary heart disease. ox-LDL induce proinflammatory cytokines (eg, MCP-1, IL-8) which allow the recruitment of monocytes to sites of inflammation and their stable adhesion to vascular endothelium. These interactions further activate mononuclear cells and induce cell proliferation that lead to the localized inflammatory response. Increasing evidence indicates that histone modifications may be important for the transcriptional activity state of genes in many cellular processes. We tested the hypothesis that ox-LDL induced inflammatory gene expression (IL-8, MCP-1) is regulated by histone modifications and beneficial effect of statin in regard to inflammation control result of control of these modifications.

Materials and Methods:
Endothelial cells (HUVEC, HAEC) , ox-LDL, Western blot, ELISA, Histone Deacetylase (HDAC) assay, ChIP

Results:
Cytokine secretion was reduced by simvastatin and but was synergistically enhanced by inhibitors of histone deacetylases trichostatin A. Incubation of endothelial cells with ox-LDL induced acetylation of histone H4, and phosphorylation, acetylation and methylation of histone H3. An increase binding of these modify histones on the promoters of il-8 and mcp-1 was noted. Whereas pre-treatment of ox-LDL-incubated cells with simvastatin reduced recruitment of phosphorylated, dimethylated and acetylated histone H3, NF-kB p65/RelA as well as of RNA polymerase II at the il-8 and mcp-1 genes promoters, the binding of histone H4 on these promoters was not affected.

Conclusion:
Taken together, histone modifications seem to play an important role in ox-LDL-induced cytokine production by human endothelial cells. The above described pathway may contribute significantly to the pathogenesis of chronic vascular lesions and coronary heart disease.

An evaluation of efficiency rate of CK – MB test in comparison with total CPK test in diagnosis of patients with acute myocardial Infarction .

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Introduction:
Acute myocardial infarction (AMI) is one of the most common and important causes of mortality and morbidity in human beings, today. Certainly, Rapid Diagnosis in Patients with AMI is very important. From valuable diagnostic methods is checking up serum cardiac enzymes. The use of troponin (cTn I , T) and CK – MB is specific in Rapid diagnosis in AMI. In this study, we compared the total CPK and CK– MB for rate of efficiency in AMI diagnosis in Ardabil Bouali hospital.

Methods and Materials:
This study was done in descriptive – analytic method in approximately one year duration. In patients with chest pain, after recurrent clinical examinations and serial ECGs, AMI was diagnosed, and we compared the results of serum levels of total CPK and CK – MB , then the data were gathered and analyzed by statistical methods.

Results:
In this search, totally 258 cases with AMI were studied that 61 patients were ignored and 197 cases entered in the study. From 197 patients, in 157 cases, level of total CPK and Ck – MB were high, but in 26 patients, total CPK was normal and from these 26 cases, in 16 cases (%8.12 of all) CK – MBI, was high. From 197 patients in 14 cases CK – MB was normal that 5 of them had high total CPK.

Conclusion:
With attention to results. it seems that CK– MB test in suspicious patients is essential in diagnosis of AMI. In addition, both of CK – MB and total CPK test in 2.53% cases can be helpful, but performing of two tests simultaneously in one patient is not economical.

Key words: Total CPK , CK – MB , Acute MI